#### Title 19

#### **STORMWATER**

## **Chapters:**

- 19.01 Stormwater Management Services
- 19.10 Stormwater Definitions
- 19.20 Construction Site Erosion Control
- 19.30 Stormwater Management

## Chapter 19.01

## **Stormwater Management Services**

# Sections:

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19.01.010 Purpose and necessity; Authorization. The city council of the city of Eau Claire finds that the management of stormwater and other surface water discharges within and beyond the Chippewa River, the Eau Claire River and other bodies of water within the city is a matter that affects the health, safety and welfare of the city, its citizens and businesses and others in the surrounding area. Failure to effectively manage stormwater affects the sanitary sewer utility operations of the city by, among other things, increasing the likelihood of infiltration and inflow into the sanitary sewer system. Surface water runoff may cause erosion of lands, threaten residences and businesses with water damage, and create environmental damage to the rivers, streams and other bodies of water within and adjacent to the city. A system for the collection and disposal of stormwater provides services to all properties within the city of Eau Claire and surrounding areas. including those properties not currently served by the system. The cost of operating and maintaining the city stormwater management system and financing necessary repairs, replacements, improvements and extensions thereof should, to the extent practicable, be allocated in relationship to the services received from the system. In order to protect the health, safety and welfare of the public, the city council hereby exercises its authority to establish a stormwater utility and establish the rates for stormwater management services. In promulgating the regulations contained in this chapter, the city is acting pursuant to authority granted by chapters 62 and 66 of the Wisconsin Statutes, including, but not limited to, sections 62.04, 62.11, 62.16(2), 62.18, 66.0621, 66.0809, 66.0811, 66.0813, 66.0821, and 66.0627. (Ord. 6212 §9, 2001; Ord. 5951 §1, 1999; Ord. 5670, 1996).

**19.01.020 Creation.** There is hereby established a stormwater utility in the city of Eau Claire. The operation of the stormwater utility shall be under the supervision of the city manager. (Ord. 5670, 1996).

19.01.030 Authority. The city, acting through the stormwater utility, may acquire, construct, lease, own, operate, maintain, extend, expand, replace, clean, dredge, repair, conduct, manage and finance such facilities, operations and activities, as are deemed by the city to be proper and reasonably necessary for a system of storm and surface water management. These facilities may include, without limitation due to enumeration, surface and underground drainage facilities, sewers, watercourses, retaining walls, ponds, streets, roads, ditches and such other facilities as will support a stormwater management system. (Ord. 5670, 1996).

### **19.01.040 Definitions.** In this chapter:

- A. "Charge" means the fee imposed under this chapter for the rendering of stormwater utility services by the city.
- B. "Equivalent runoff unit" or "ERU" is the basic unit by which a storm sewer charge is calculated under this chapter and is based upon the impervious area reasonably determined by the city.
- C. "Impervious area" means a surface which has been compacted or covered with a layer of material so that it is highly resistant to infiltration by rain water. The term includes, without limitation due to enumeration, all areas covered by structures, roof extensions, patios, porches, driveways, loading docks and sidewalks, and semi-impervious surfaces such as compacted gravel, all as measured on a horizontal plane.
  - D. "Duplex" means a residential dwelling having two dwelling units.
- E. "Dwelling unit" means a room or group of rooms including cooking accommodations, occupied by one family, and in which not more than two persons, other than members of the family, are lodged or boarded for compensation at any one time.
  - F. "Multifamily unit" means any residential property comprised of three or more dwelling units.
- G. "Nonresidential property" means a lot or parcel of land, with improvements such as a building, structure, grading or substantial landscaping, which is not residential property, excluding publicly-owned rights of way, airport runways, airport taxiways, recreational trails, and publicly-owned or privately-owned rail beds utilized for railroad transportation.
- H. "Residential property" means a lot or parcel of land developed exclusively for residential purposes, including single-family units and duplexes not exceeding one acre in area, and multifamily units. The term includes manufactured homes.
- I. "Single family unit" means any residential property, including manufactured homes, consisting of one dwelling unit.
- J. "Stormwater utility" means the utility established under this chapter for the purpose of managing stormwater and imposing charges for the recovery of costs connected with such stormwater management.
- K. "Undeveloped property" means property that is not developed by the addition of an improvement such as a building, structure, grading or substantial landscaping. A property shall be considered to be developed if:
- 1. A certificate of occupancy has been issued for a building or structure on the property or, if no certificate of occupancy has been issued, upon substantial completion of construction or final inspection; or
- 2. Construction of an improvement on the property is at least 50 per cent completed and such construction has ceased for a period of at least 3 months, whether consecutive or not. (Ord. 7062, §1 2013; Ord. 5878, 1998; Ord. 5670, 1996).
- 19.01.050 Rates and charges. A. The basis for computation of the charge for stormwater services to lots and parcels of land within the city is established under this section. The amount of charge to be imposed, the establishment of formulas for the calculation of charges, the creation of customer classifications for the imposition of charges, and changes in such charges, formulas and customer classifications may be made by resolution. All charges established pursuant to this chapter shall be fair and reasonable. A schedule of current charges shall be maintained and on file in the office of the city clerk.

- B. Charges shall be imposed to recover all or a portion of the costs of the stormwater utility. Such charges may include the following components:
- 1. Base charge. A base charge may be imposed on all property in the city. The base charge is established in recognition of the fact that all properties in the city receive services from the stormwater management activities of the city and that all property contributes to some degree to the stormwater discharge that must be managed by the city. The base charge shall be assessed to collect the administrative costs of the stormwater utility and may include capital, operating and maintenance costs of the stormwater utility which are not recovered by other means. The base charge may be based on the size of a lot or parcel of land.
- 2. Equivalent runoff unit charge (ERU). An equivalent runoff unit charge may be imposed on all property that has an impervious area. The ERU charge shall be assessed based upon the impervious area as reasonably determined by the city. The ERU is established to be 3,000 square feet. (Ord. 7062, §2 2013; Ord. 5670, 1996).
- <u>19.01.060 Classifications of customers</u>. The council may establish classifications other than the customer classifications under section 19.01.090 as will be likely to provide a reasonable and fair distribution of the costs of the stormwater utility. (Ord. 5670, 1996).
- 19.01.070 Billing. A. Bills for stormwater utility charges shall be mailed to the recipient designated by the owner of the property to which the bill relates, provided that such mailing shall not relieve the owner of rental property from liability for the charges in the event payment is not made. The owner of any property which is occupied by tenants shall have the right to examine the appropriate records of the city to determine whether such rates and charges have been paid by such tenants, provided that such examination shall be made at the office at which the records are kept during normal business hours.
- B. A late payment charge of 3 percent will be added to bills not paid within 20 days of issuance in accordance with the provisions of s. 14.20.020 of this code.
- C. All stormwater service charges shall be taxed and collected and shall be a lien upon the property served in the same manner as water service charges are taxed and collected under the provisions of Wisconsin Statutes, section 66.0809, and the provisions of title 14 of this code. (Ord. 6212 §10, 2001; Ord. 5670, 1996).
- <u>19.01.090 Customer classifications</u>. A. For the purpose of imposing the charges imposed under this chapter, all lots and parcels of land in the city shall be classified into the following customer classifications:
  - 1. Residential -- single family unit.
  - 2. Residential -- duplex.
  - 3. Residential -- multifamily.
  - 4. Nonresidential.
  - 5. Undeveloped.

- B. The ERU charges for the foregoing classifications shall be established as follows:
  - Residential -- single family unit: one ERU.
  - 2. Residential -- duplex: 0.5 ERU times each dwelling unit.
  - 3. Residential -- multifamily: 0.4 ERU times the number of dwelling units within

the multifamily dwelling.

- 4. Nonresidential -- one ERU times a factor obtained by dividing the total impervious area of the nonresidential property by the square footage equivalent for one ERU (3,000). Such impervious area shall be determined based on the best information reasonably available. The result shall be rounded down to the nearest five-tenths (0.5). The minimum charge for a nonresidential property shall be equal to the rate for five-tenths (0.5) of one ERU.
- C. Undeveloped property shall be charged based on a factor established by the city council resolution adopted under s. 19.01.050 A.
- D. All unoccupied lots and parcels of land shall be subject to stormwater utility charges. (Ord. 7062, §4 2013; Ord. 5670, 1996).
- 19.01.100 New construction. Except for single family units, a property owner shall be responsible for submitting a stormwater utility service application at the time a building permit is issued or a site plan review is conducted. The application shall be made on a form prescribed by the city and provided with each application for a building permit or application for site plan review. Failure to submit such stormwater utility service application or providing false information on such form shall be a violation of this chapter. (Ord. 5670, 1996).
- 19.01.110 Appeal. A. A stormwater utility charge may be appealed to the utility appeals board created under ch. 2.50 of the code of ordinances. An appeal can be undertaken by filing a written appeal with the city clerk prior to the due date of the charge or within 30 days of payment. The written appeal shall specify all grounds for challenge to the amount of the charge and shall state the amount of charge that the appellant considers to be appropriate. Failure to appeal within 30 days of payment shall deprive the utility appeals board of jurisdiction to hear the appeal.
- B. In considering an appeal, the utility appeals board shall determine whether the stormwater utility charge is fair and reasonable and, in the event the appeal is granted, whether or not a refund is due the appellant and the amount of the refund. The utility appeals board shall conduct a formal or informal hearing and obtain sufficient facts upon which to make a determination. The decision of the utility appeals board shall be based upon the evidence presented to it. The utility appeals board shall notify the appellant in writing of its determination. (Ord. 5670, 1996).
- **19.01.130 Penalty.** A person violating s. 19.01.100 shall, upon conviction, pay a forfeiture not to exceed \$500 for each offense, in addition to the costs of prosecution which are allowed by law. Each day during which a violation exists shall constitute a separate offense. (Ord. 5670, 1996).

## **Chapter 19.10**

# STORMWATER DEFINITIONS

## Sections:

#### 19.10.010 Definitions.

### 19.10.010 Definitions. In this title:

- A. "Adequate sod, or self-sustaining vegetative cover" means maintenance of sufficient vegetation types and densities such that the physical integrity of the streambank or lakeshore is preserved. Self-sustaining vegetative cover includes grasses, forbs, sedges and duff layers of fallen leaves and woody debris.
- B. "Atlas 14" means the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States,
- C. "Average annual rainfall" means a calendar year of precipitation, excluding snow, determined to be Minneapolis, 1959 (March 13 November 4).
- D. "Best management practice" or "BMP" means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff off-site.
- E. "BOD5" means biological oxygen demand measured over a five day period at a temperature of 20 degrees Celsius.
  - F. "Clear water waste" means that defined in Section H.62.12 Wisconsin Administrative Code.
  - G. "Closed depression" means a low area that does not have a drainage outlet.
- H. "Construction site" means an area upon which one or more land disturbing construction activities occur, including areas that are part of a larger common plan of development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan. A long-range planning document that describes separate construction projects, such as a 20-year transportation improvement plan, is not a common plan of development.
- I. Design Storm" means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall.
- J. "Detention" means a stormwater management facility having a controlled release other than pumping, infiltration, or evaporation.
- K. "Development" means residential, commercial, industrial or institutional land uses and associated roads.
- L. "Drainage Way" means an area where runoff from adjacent areas either collects or passes through the site, regardless of whether the runoff is from private, public property or road right-of-way. A drainage way under this section may be natural or constructed.
- M. "Erosion" means the process by which the land's surface is worn away by the action of wind, water, ice or gravity.
- N. "Erosion and sediment control plan" means a comprehensive plan developed to address pollution caused by erosion and sedimentation of soil particles or rock fragments during construction.
- O. "Final stabilization" means that all land disturbing construction activities at the construction site have been completed and that a uniform perennial vegetative cover has been established with a density of at least 70 percent of the cover for the unpaved areas and areas not covered by permanent structures or that employ equivalent permanent stabilization measures.
- P. "Highest local groundwater elevation" means the highest groundwater elevation on a site as indicated by the depth of mottled soil or measured groundwater elevations.
- Q. "Impervious surface" means an area that releases as runoff all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, gravel or paved parking lots and streets are examples of areas that typically are impervious.
- R. "In-fill" means an undeveloped area of land located within an existing urban sewer service area, currently served by city utilities, and surrounded by development or development and natural or man-made features where development cannot occur.
  - S. "Infiltration" means the entry of precipitation or runoff into or through the soil.

- T. "Land disturbing activity" means any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment off-site. Land disturbing construction activity includes, without limitation, clearing and grubbing, demolition, excavating, pit trench dewatering, filling, and grading activities.
- U. "Landowner" means any person holding fee title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of stormwater BMPs on the property.
- V. "Maintenance plan" means a legal document that provides for long-term maintenance of stormwater management practices.
- W. "Maximum Extent Practicable" or "MEP" means a level of implementing best management practices in order to achieve a performance standard different from the performance standard specified in this chapter, which takes into account the best available technology, cost effectiveness, and other competing issues such as human safety and welfare, endangered and threatened resources, historic properties and geographic features. MEP allows flexibility in the way to meet the performance standards and may vary based on the performance standards and site conditions. MEP applies only when the responsible party has demonstrated to the Director of Engineering's satisfaction that a performance standard is not achievable and that a lower level of performance is appropriate.
- X. "New development" means development resulting from the conversion of previously undeveloped land or agricultural land uses.
- Y. "NRCS MSE3 or MSE4 distribution" means a specific rainfall distribution developed by the United States Department of Agriculture, Natural Resources Conservation Service, using county-specific precipitation amounts from Atlas 14 for Eau Claire County, WI.
  - Z. "Off-site" means located outside the property boundary described in the permit application.
  - AA. "On-site" means located within the property boundary described in the permit application.
  - BB. "Ordinary high-water mark" has the meaning given in s. NR 115.03 (6), Wis. Adm. Code.
- CC. "Performance standard" means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.
- DD. "Permit" means a written authorization made by the Director of Engineering to the applicant to conduct land disturbing construction activity or to discharge post-construction runoff to waters of the state.
  - EE. "Pollutant" has the meaning given in s. 283.01 (13), Wis. Stats.
  - FF. "Pollution" has the meaning given in s. 281.01 (10), Wis. Stats.
- GG. "Post-construction site" means a construction site following the completion of land disturbing construction activity and final site stabilization.
- HH. "Pre-development condition" means the extent and distribution of land cover types present before the initiation of land disturbing construction activity, assuming that all land uses prior to development activity are managed in an environmentally sound manner.
  - II. "Preventive action limit" has the meaning given in s. NR 140.05 (17), Wis. Adm. Code.
- JJ. "Protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the widths defined in s. 19.30.070 A, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface.
  - KK. "Redevelopment" means areas where development is replacing older development.
- LL. "Responsible party" means the landowner or any other entity performing services to meet the requirements of this ordinance through a contract or other agreement.
- MM. "Retention" means a stormwater management facility that does not have a controlled release point other than pumping, infiltration, or evaporation.
- NN. "Runoff" means stormwater or precipitation including rain, snow or ice melt, or similar water that moves on the land surface via sheet or channelized flow.
- OO. "Sediment" means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.
- PP. "Site" means the entire area included in the legal description of the parcel on which the land disturbing construction activity is proposed in the permit application.
- QQ. "Stormwater management plan" means a comprehensive plan designed to reduce the discharge of pollutants from stormwater, after the site has under gone final stabilization, following completion of the construction activity.

- RR. "Stormwater management system plan" is a comprehensive plan designed to reduce the discharge of runoff and pollutants from hydrologic units on a regional or municipal scale.
- SS. "Storm Sewer System" means all stormwater conveyance systems including, piped storm sewers, stormwater facilities, swales, ditches, streams, public ponds, lakes, and rivers.
- TT. "Technical standard" means a document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.
- UU. "Top of the channel" means an edge, or point on the landscape landward from the ordinary high water mark of a surface water of the state, where the slope of the land begins to be less than 12 percent continually for at least 50 feet. If the slope of the land is 12 percent or less continually for the initial 50 feet landward from the ordinary high-water mark, the top of the channel is the ordinary high-water mark.
- VV. "Total maximum daily load" or "TMDL" means the amount of pollutants specified as a function of one or more water quality parameters, that can be discharged per day into a water quality limited segment and still ensure attainment of the applicable water quality standard.
- WW. "TR-55" means the United States department of agriculture, natural resources conservation service (previously soil conservation service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986, which is incorporated by reference for this chapter.
  - XX. "TSS" means total suspended solids. (Ord. 7239, §3, 2017)

## **Chapter 19.20**

## CONSTRUCTION SITE EROSION CONTROL

## **Sections:**

- 19.20.010 When required.
- 19.20.020 Erosion and sediment control performance standards for all sites.
- 19.20.030 Major sites Additional performance standards.
- 19.20.040 Permitting requirements, procedures, and fees.
- 19.20.050 Technical standards.
- 19.20.060 Inspections.
- **19.20.010 When required.** A. All construction sites are subject to this ordinance, except the following in subsection B below.
  - B. Exemptions. This ordinance does not apply to the following:
- 1. One and two family home construction covered by an erosion control standard in the Uniform Dwelling Code, unless the land disturbance involves major site activity described in s 19.20.030 A.(4),(5), or (6) in which case the exemption shall not apply.
- 2. A public work project for which the Director of Engineering has performed a preliminary review of the land disturbing activity and determined that the activity may be exempted from some, or all of the requirements of this ordinance.

### 19.20.020 Erosion and sediment control performance standards for all sites .

- A. Erosion and Sediment Control Practices. The responsible party shall implement erosion and sediment control best management practices at each site where land disturbing activity is to occur that accomplish all of the following:
  - Prevent tracking of sediment from the construction site;
  - 2. Prevent discharge of sediments as part of site de-watering;
- 3. Protect inlets, pipes, ditches, drainage ways, and downstream waters from sediment discharged from disturbed areas.
- 4. Stabilize stockpiles or disturbed areas left undisturbed for more than one week. Stabilization measures may include silt fence, seeding, containment berms, covering, or other approved measures.
- 5. Manage the use, storage, and disposal of chemicals, cement and other compounds and materials used in construction to prevent their transport by runoff.

- B. Location. The BMPs shall be located so that treatment occurs before runoff exits the site, unless an alternate location is approved by the Director of Engineering.
  - C. Implementation. The BMPs shall be implemented as follows:
- 1. Erosion and sediment control practices shall be constructed or installed before land disturbing construction activities begin.
  - 2. Erosion and sediment control practices shall be maintained until final stabilization.
- 3. Final stabilization activity shall commence when land disturbing activities cease and final grade has been reached on any portion of the site.
- 4. Temporary stabilization activity shall commence when land disturbing activities have temporarily ceased and will not resume for a period exceeding 14 calendar days.
- 5. BMPs that are no longer necessary for erosion and sediment control shall be removed by the responsible party.

## 19.20.030 Major sites - Additional performance standards.

- A. Applicability. For construction sites, except those exempted above, that meet one or more of the following conditions, the responsible party shall comply with the requirements of this section in addition to others in this chapter:
  - 1. The land disturbing activity is part of a site plan required by s. 18.45.020; or
- 2. The land disturbing activity occurs on a gross aggregate area of 15,000 square feet or more; or
- 3. The land disturbing activity creates an additional 3,000 square feet or more of the area consisting of impervious surfaces; or
- 4. The land disturbing activity disturbs an existing slope in excess of 20%, or creates a slope in excess of 20% with a vertical elevation change greater than 10 vertical feet from existing ground; or
- 5. The land disturbing activity modifies an existing drainage way or includes filling in a closed depression; or
- 6. In the opinion of the Director of Engineering, the runoff from the site resulting from the land disturbing activity will exceed the safe capacity of the existing drainage facilities, or cause undue ditch erosion, or increase water pollution by scour and transport of particles, or endanger downstream property.
- B. Erosion and sediment control plans. The responsible party shall prepare an erosion and sediment control plan.
- 1. The sediment control plan shall be prepared consistent with the procedures and requirements specified in the *City of Eau Claire Stormwater Management Guidelines*.
- 2. The erosion and sediment control plan shall include erosion and sediment control practices at each site where land disturbing activity occurs to accomplish to the maximum extent practicable the actions listed in s. 19.20.020 A.
- 3. The erosion and sediment control plan shall demonstrate compliance with the additional performance standards in subsection C. below, as applicable.
- C. Additional Performance Standards. The following additional erosion and sediment control practices shall be employed:
- 1. Maximize maintenance of existing vegetation and topsoil, especially adjacent to surface waters.
  - 2. Minimize soil compaction.
- 3. No land disturbing construction activity on slopes of 20 percent or more, unless approved as otherwise meeting the standards of this Title and implementing such additional safeguards, given the slope and site conditions, required by the Director of Engineering and approved by the City.
  - 4. Development of spill prevention and response procedures.
- 5. BMPs that, by design, discharge no more than 5 tons of sediment per acre per year, or to the maximum extent practicable, minimize the sediment load carried in runoff from initial grading to final stabilization if a written explanation is provided in the erosion and sediment control plan and is accepted with or without modification by the Director of Engineering.
- 6. Erosion and sediment control BMPs may be combined to meet the requirements of this paragraph. Credit may be given toward meeting the sediment performance standard of this paragraph for limiting the duration or area, or both, of land disturbing construction activity, or for other appropriate mechanisms.
- 7. The BMPs used to comply with this section shall be located so that treatment occurs before runoff exits the site.

## 19.20.040 Permitting requirements, procedures, and fees.

- A. Permit Required. No responsible party may commence a land disturbing activity on a major site meeting one or more of the conditions specified in s. 19.20.030 without receiving prior approval of an erosion and sediment control plan for the site and a permit in the form of a "Grading and Drainage Approval" letter from the Director of Engineering.
- B. Permit Application and Fees. The responsible party for a major site shall submit an application for a permit, an erosion and sediment control plan, and shall pay an application fee as provided in the Eau Claire Fee and License Schedule.
- C. Permit Application Review and Approval. The Director of Engineering shall review any complete permit application submitted with the required fee. The permit review and approval process shall follow this ordinance and the guidelines specified in the *City of Eau Claire Stormwater Management Guidelines*. Permits issued under this section may include conditions established by the Director of Engineering consistent with and deemed necessary to assurance compliance with said ordinance and guidelines and the performance standards therein.
- D. Insurance/Proof of. As a condition of approval and issuance of the permit, the applicant shall provide proof of general commercial liability insurance in the amount of not less than \$1,000,000, an irrevocable letter of credit, or like other guarantee acceptable to the City.
- E. Permit Duration. Permits issued under this section shall be valid for one year from the date of issuance sunless extended for up to one additional year by the Director of Engineering.
- F. Maintenance. The responsible party throughout the duration of the construction activities shall maintain all BMPs necessary to meet the requirements of this ordinance until the site has undergone final stabilization.
- <u>19.20.050 Technical Standards.</u> All BMPs required for compliance with this ordinance shall meet design criteria, standards and specifications based on any of the following:
- A. Design guidance and technical standards identified or developed by the Wisconsin Department of Natural Resources under subchapter V of chapter NR 151, Wis. Adm. Code.
- B. Soil loss prediction tools (such as the Universal Soil Loss Equation (USLE)) when using an appropriate rainfall or runoff factor (also referred to as the R factor) or an appropriate design storm and precipitation distribution, and when considering the geographic location of the site and the period of disturbance.
  - C. Technical standards and methods approved by the Director of Engineering.
- <u>19.20.060 Inspections.</u> If land disturbing construction activities are occurring, including those not requiring a permit under this ordinance, the Director of Engineering may enter the land pursuant to the provisions of s. 66.0119 (1), (2), and (3), Wis. Stats. (Ord. 7239, §4, 2017)

### STORMWATER MANAGEMENT

### Sections:

- 19.30.010 When required.
- 19.30.020 Performance standards and stormwater management plan.
- 19.30.030 Peak runoff rate.
- 19.30.040 Total suspended solids.
- 19.30.050 Minimum building elevations.
- 19.30.060 Infiltration.
- 19.30.070 Protective areas.
- 19.30.080 Fueling and vehicle maintenance areas.
- 19.30.190 General considerations for stormwater management measures.
- 19.30.100 Permitting requirements, procedures, and fees.
- 19.30.110 Post-construction stormwater management plan certification.
- 19.30.120 Maintenance plan required.
- 19.30.130 Violation and Penalty.
- <u>19.30.010 When required.</u> A. Land disturbing activity shall be subject to on-site detention and runoff control of stormwater and be required to submit a stormwater management plan and a site grading plan if the activity meets one or more of the following criteria, except as provided in s. 19.30.010 B:
  - 1. The land disturbing activity is part of a site plan required by s. 18.45.020; or
- 2. The land disturbing activity occurs on a gross aggregate area of 15,000 square feet or more; or
- 3. The land disturbing activity creates an additional 3,000 square feet or more of impervious surfaces; or
- 4. The land disturbing activity disturbs an existing natural slope in excess of 20%, or creates a slope in excess of 20% with a vertical elevation change greater than 10 vertical feet from existing ground; or
- 5. The land disturbing activity modifies an existing drainage way or includes filling in a closed depression; or
- 6. In the opinion of the Director of Engineering, the runoff from the site resulting from the land disturbing activity while marginally below one or more of the above standards in cumulative effect is reasonably expected to exceed the safe capacity of the existing drainage facilities, cause undue erosion, increase water pollution by scour and transport or particles, or damage downstream property.
- B. Exemptions. A land disturbing activity that meets any of the following criteria is exempt from the requirements of this ordinance:
- 1. Underground utility construction, but not including the construction of any above ground structures associated with utility construction.
- 2. One and two family home construction covered by a stormwater management standard in the Uniform Dwelling Code, unless the land disturbance involves a major site activity described in s 19.30.010 A (4), (5), or (6) in which case the exemption shall not apply.
- 3. A public work project for which the Director of Engineering has performed a preliminary review of the land disturbing activity and determined that the activity may be exempted from some, or all of the requirements of this ordinance.
- C. Other Authorities. The requirements of this ordinance do not pre-empt more stringent stormwater management requirements that may be imposed by any of the following:
- 1. Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under Wis. Adm. Code and Wis. Stats.
- 2. Targeted non-agricultural performance standards promulgated in rules by the Wisconsin Department of Natural Resources under Wis. Adm. Code.

### 19.30.020 Performance standards and stormwater management plan.

- A. The responsible party shall prepare a stormwater management plan as described in the City of Eau Claire stormwater management guidelines. The stormwater management plan shall include sections addressing total suspended solids reduction, peak runoff rate reduction, minimum building elevations, infiltration, protective areas, and private facility maintenance plans.
  - B. The Director of Engineering shall approve all stormwater management plans and calculations.
- C. Maintenance of Effort. For redevelopment sites where the redevelopment will be replacing older development that was subject to post-construction performance standards of NR 151 in effect on or after October 1, 2004, the responsible party shall meet the total suspended solids reduction, peak runoff rate control, infiltration, and protective areas standards applicable to the older development or meet the redevelopment standards of this ordinance, whichever is more stringent.

## 19.30.030 Peak runoff rate.

- A. The post-construction peak runoff rate resulting from the 3 inch, 24 hour rainfall event shall not exceed pre-development peak runoff rates for all events smaller than, and including, the 1% exceedance probability, 24 hour design rainfall event occurring over the same site.
- B. Peak discharges shall be calculated using TR-55 runoff curve number methodology, SWMM, or other methods approved by the Director of Engineering. Calculations for the 1% exceedance probability, 24 hour event shall be based on Atlas 14 precipitation depths identified for Eau Claire County. Calculations for all events shall use the appropriate NRCS rainfall depth and NRCS MSE3 rainfall distribution. Pre-development conditions shall assume "good hydrologic conditions" for appropriate land covers using the curve numbers in the following table. Infill and redevelopment shall use curve numbers representative of the predevelopment land use. The meanings of "hydrologic soil group" and "runoff curve number" are as determined by TR-55.

Maximum Pre-development Runoff Curve Numbers					
	Hydrologic Soil Group				
Runoff Curve Number	Α	В	С	D	
Woodland	30	55	70	77	
Grassland	39	61	71	78	
Cropland	55	69	78	83	

- C. The Director of Engineering shall have the authority, exercised in accordance with accepted engineering practices and principles, to increase or decrease the allowable release rate based on the downstream conveyance system capacity and capacity of the regional stormwater facilities serving the drainage basin.
- D. The Director of Engineering shall have the authority, exercised in accordance with accepted engineering practices and principles, to restrict the release rate to a rate below the pre-development 3 inch, 24-hour rainfall event in drainage areas with limited downstream conveyance systems.
- E. Where on-site detention is used for runoff control, the detention facility shall be constructed to contain and/or pass the runoff of a 1% annual exceedance probability (100 year) design storm (Atlas 14/NRCS) of any duration without damage to the detention facility.
- F. Plans and hydraulic computations for all structural or nonstructural measures or other protective devices to be constructed in connection with the proposed work shall be submitted by a Professional Engineer licensed to practice in Wisconsin in accordance with accepted engineering practice and requirements of this ordinance and shall include:
  - 1. Pre-development runoff computations;
- 2. Estimated rate of discharge in cubic feet per second post-construction at all structural or non-structural measures and at the point of discharge from the site location for events listed in s. 19.30.030 A.
- 3. The pre-development storm event frequency discharge rates in cubic feet per second for events listed in s. 19.30.030 A, upon which the design of plans for the site location is based;
  - 4. Provisions to carry runoff to the nearest adequate outlet; and
- 5. If drainage easements are required, documentation of perpetual maintenance and control.

G. At the discretion of the Director of Engineering, exercised in accordance with accepted engineering practices and principles, the developer shall be required to prepare plans for reducing or detaining peak discharges beyond what is required above.

## 19.30.040 Total suspended solids.

A. Best management practices ("BMPs") shall be designed by a Professional Engineer licensed to practice in Wisconsin in accordance with accepted engineering practice and requirements of this ordinance, installed, and maintained to control total suspended solids from parking areas, material storage areas, and roads carried in runoff from the post-construction site as follows:

TSS Reduction Standards				
Development Type	TSS Reduction			
New Development	80 percent			
In-fill Development ≥ 1 acre	80 percent			
In-fill Development < 1 acre and Redevelopment	40 percent			

- 1. BMPs shall be designed in accordance with the above table. If the design cannot achieve the applicable total suspended solids reduction specified, a written and site-specific explanation must be submitted detailing why that level of reduction is not attainable to the maximum extent practicable and propose an alternate site that shall be improved with a new or enhanced BMP by the responsible party to offset the below standards deviation at the primary site. Use of alternate sites to meet these standards may be allowed if approved, as conditioned, by the Director of Engineering to meet the overall objectives of this Title.
- 2. Total suspended solid reductions shall be calculated using a methodology or computer model recognized and approved by then Wisconsin Department of Natural Resources for this intended purpose.
- 3. The design shall be based on average annual rainfall, as compared to no runoff management controls.

#### 19.30.050 Minimum building elevations.

- A. For all lots adjacent to stormwater detention facilities, lakes, wetlands, streams, and drainage ditches, the responsible party shall identify the estimated water surface elevation during a 1% annual exceedance probability (100 year) rainfall event.
- B. For lots adjacent to closed depressions that have no discharge location for tributary runoff, the responsible party shall identify the estimated water surface elevation in the closed depression during a 1% annual exceedance probability (100 year), 24 rainfall event on frozen ground including an additional runoff volume of 1.2 inches from all pervious areas to account for snow melt.
- C. The responsible party must adhere to the following minimum building elevations, utilizing the City datum:
- 1. The lowest opening (including basement) shall be at least 2 feet above the estimated 100-year water surface elevation,
- 2. The lowest floor (including basement) shall be at least 3 feet above the highest local groundwater elevation,
- 3. All HVAC facilities shall be at least 2 feet above the estimated 100-year water surface elevation,
- 4. All HVAC facilities shall be at least 3 feet above the highest local groundwater elevation, and
- 5. The lowest opening shall be at least 2 feet above the estimated 100-year water surface elevation of emergency overflow swales.
- D. The minimum building elevation requirements identified in this s. 19.30.050 A., B and C., are applicable only to structures located outside floodplains delineated by the Federal Emergency Management Agency (FEMA).

19.30.060 Infiltration. BMPs shall be designed by a Professional Engineer licensed to practice in Wisconsin, installed and maintained to infiltrate runoff to the MEP in accordance with NR 151.12(5)(c). Infiltration practices cannot be used for peak rate runoff control unless no out-fill is accessible and infiltration practices must be approved by the Director of Engineering. The Director of Engineering may, in accordance with accepted engineering practices and principles, prohibit infiltration practices in areas where retention or infiltration facilities pose a risk to infrastructure, water quality, or public safety, or downgradient properties.

## 19.30.070 Protective areas.

- A. "Protective areas" is defined in s. 19.10.010. In this section, "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, so that runoff cannot enter the enclosure at this location. Protective width varies according to resource type:
  - 1. For lakes and rivers, 40 feet from top of bank as determined by the City Engineer.
- B. This section applies to post-construction sites located within a protective area, except those areas exempted pursuant to s. 19.30.070 C. The following requirements shall be met:
- 1. Impervious surfaces shall be kept out of the protective area to the maximum extent practicable. The stormwater management plan shall contain a written site-specific explanation for any parts of the protective area that are disturbed during construction.
- 2. Where land disturbing construction activity occurs within a protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70% or greater shall be established and maintained. The adequate sod or self-sustaining cover shall be sufficient to provide for bank stability, maintenance of fish habitat, and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion, such as on steep slopes or where high velocity flow occurs.
- 3. Best management practices such as filter strips, swales, or wet detention basins, that are designed to control pollutants from non-point sources, may be located in the protective area.
  - C. This section does not apply to:

culverts.

- 1. Except as provided in s. 19.30.020 C, redevelopment post-construction sites.
- 2. In-fill development areas less than one (1) acre.
- 3. Structures that cross or access surface waters such as boat landings, bridges and
- 4. Structures constructed in accordance with s. 59.692(1v). Wis. Statutes.
- 5. Post-construction sites from which runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet local ordinance requirements for TSS and peak runoff rate reduction, except to the extent that vegetative ground cover is necessary to maintain bank stability.
- <u>19.30.080 Fueling and vehicle maintenance areas.</u> Vehicle fueling and maintenance areas shall have best management practices designed, installed, and maintained to contain petroleum on-site such that there is no visible petroleum sheen in runoff off-site.

## 19.30.090 General considerations for stormwater management measures.

- A. Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used, to the extent possible, to meet the requirements of this section.
- B. Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.
- C. BMP Location. To comply with the performance standards required this ordinance, BMPs may be located on–site or off–site as part of a regional stormwater device, practice or system, but shall be installed in accordance with s. NR 151.003, Wis. Adm. Code. The Director of Engineering may approve off-site management measures provided that all of the following conditions are met:
- 1. The Director of Engineering determines that the post-construction runoff is covered by a stormwater management system plan that is approved by the city of Eau Claire and that contains management requirements consistent with the purpose and intent of this ordinance.

- 2. The off-site facility meets all of the following conditions:
  - a. The facility is in place.
  - b. The facility is constructed as specified and record as-built drawings are

available.

- c. The facility is designed and adequately sized to provide a level of stormwater control equal to or greater than that which would be afforded by on-site practices meeting the performance standards of this ordinance.
- d. The facility has a legally obligated entity responsible for its long-term operation and maintenance.
- D. Where a regional treatment option exists such that the Director of Engineering exempts the applicant from all or part of the minimum on-site stormwater management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the Director of Engineering. In determining the fee for post-construction runoff, the Director of Engineering shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the regional treatment option.

### 19.30.100 Permitting requirements, procedures, and fees.

- A. Permit Required. No responsible party not exempt under s. 19.30.010 B may undertake a land disturbing activity without receiving a post-construction runoff permit in the form of a "Grading and Drainage Approval" letter from the Director of Engineering prior to commencing the proposed activity.
- B. Permit Application and Fees. The responsible party shall submit a permit application to the Director of Engineering on a form provided by the Director of Engineering for that purpose. Unless otherwise exempt, a permit application must be accompanied by a stormwater management plan, a maintenance agreement and a non-refundable permit application fee as stated in the City of Eau Claire Fee and License Schedule.
- C. Permit Application Review and Approval. The Director of Engineering shall review any permit application that is submitted with a stormwater management plan, maintenance agreement, and the required fee. The permit review and approval process shall follow the guidelines specified in the *City of Eau Claire stormwater management guidelines*.
- D. Permit Requirements. All permits issued under this ordinance shall be subject to the conditions specified in the *City of Eau Claire stormwater management guidelines*, and holders of permits issued under this ordinance shall be deemed to have accepted these conditions.
- E. Permit Conditions. Permits issued under this subsection may include conditions established by the Director of Engineering in addition to the requirements needed to meet the performance standards included in this ordinance.
- F. Permit Duration. Permits issued under this section shall be valid from the date of issuance through the date the Director of Engineering notifies the responsible party that all stormwater management practices have passed the final inspection required by the *City of Eau Claire stormwater management guidelines*, unless one of the following conditions occurs:
  - 1. work is not initiated within one year of permit issuance, or
  - 2. work is idle for 12 consecutive months, or
  - 3. work is not completed within 3 years of permit issuance.
- G. Stop Work. The Director of Engineering may suspend or revoke a permit for violation of a permit condition, following procedures detailed in the *City of Eau Claire stormwater management guidelines* An action by the Director of Engineering to suspend or revoke this permit may be appealed to the Building Code Committee in accordance with s. 16.04.160.
- 19.30.110 Post construction stormwater management plan certification. Prior to acceptance by the City, or the issuance of the Final Certificate of Occupancy, the Professional Engineer responsible for the design of the stormwater facilities and the stormwater management plan shall certify that the work has been completed in accordance with the approved design, including any revisions approved by the City.

19.30.120 Maintenance plan required. A maintenance plan is required for all private stormwater management practices except those that serve one and two family residential development. The plan shall be an agreement between the City of Eau Claire and the responsible party to provide for maintenance of stormwater practices beyond the duration period of the permit. The maintenance plan shall name the party responsible for providing funding and long-term maintenance of stormwater practices installed. The maintenance plan shall be filed with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the private stormwater management practice. The maintenance plan shall meet all provisions required in the City of Eau Claire stormwater management guidelines

<u>19.30.130 Violation--Penalty.</u> Any person or corporation violating the provisions of this chapter shall, upon conviction, be fined in a sum or not less than \$100 (one hundred dollars) and not more than \$1,000 (one thousand dollars) per day of violation, if applicable, plus costs of restoration, court costs and costs of prosecution. (Ord. 7239, §5, 2017)

## **Chapter 19.40**

## **DISCHARGES TO THE STORM SEWER**

#### Sections:

19.40.010 Acceptable discharges.

19.40.020 Prohibited discharges.

19.40.030 Violation--Penalty.

19.40.010 Acceptable discharges. A. Acceptable discharges to the storm sewer system include:

- 1. Stormwater runoff.
- 2. Discharges authorized by a WPDES permit.
- 3. Discharges meeting the performance standard established for an approved site plan.
- 4. Discharges not requiring a WPDES permit such as clear water wastes as defined in Section H.62.12 Wisconsin Administrative Code.

19.40.020 Prohibited discharges. A. Prohibited discharges include, but are not limited to:

- 1. Materials identified in 8.40.020 Storm Sewers Prohibited Materials.
- 2. Materials identified in 8.40.030 Rubbish disposal River banks-Streets.
- 3. Sediment.
- 4. Total suspended solids (TSS) in excess of thresholds established for approved site

plans.

- 5. Petroleum products.
- 6. Detergents.
- 7. Discharges with a pH below 6.0 or in excess of 9.0.
- 8. Discharges with a BOD5 in excess of 15 milligrams per liter.
- 9. Other solid or dissolved pollutants.

<u>19.40.030 Violation--Penalty.</u> Any person or corporation violating the provisions of this chapter shall, upon conviction, be fined in a sum or not less than \$100 (one hundred dollars) and not more than \$1,000 (one thousand dollars) per day of violation, if applicable, plus costs of restoration, court costs and costs of prosecution. (Ord. 7239, §6, 2017)